

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1-38. (Cancelled).

39. (Withdrawn) The method of claim 38, wherein the density of contact points comprises from at least about 1 nanofiber per micron² to about 2000 or more nanofibers per micron², from at least about 5 nanofiber per micron² to about 1000 or more nanofibers per micron², from at least about 10 nanofiber per micron² to about 500 or more nanofibers per micron², from at least about 50 nanofiber per micron² to about 250 or more nanofibers per micron², or from at least about 75 nanofiber per micron² to about 150 or more nanofibers per micron²; and, the plurality of contact points comprises a percent contact area of the second surface from about 0.1% to at least about 50% or more, from about 0.5% to at least about 40% or more, from about 1% to at least about 30% or more, from about 2% to at least about 20% or more, or from about 5% to at least about 10% or more.

40. (Currently amended) A method of joining two or more articles, the method comprising:

- i) providing a first article having at least a first surface;
- ii) providing at least a second article having at least a first surface;

and,

iii) providing a layer of silicon or silicon oxide nanofibers disposed between the first surface of the first article and the first surface of the at least second article, whereby the nanofibers contact the first surface of the first article at a plurality of contact points and the first surface of the at least second article at a plurality of contact points, wherein at least a portion of the plurality of nanofibers contacts the first surface of the first and second articles on a side surface of said nanofibers wherein the contacting

creates van der Waals forces between the nanofibers and the first surface of the first and second articles, such that the van der Waals forces between the nanofibers and the first surface of the first article and the first surface of the at least second article are sufficient to adhere the articles together.

41. (Withdrawn) The method of claim 40, wherein the forces between the nanofibers and the first surface of the second article and between the nanofibers and the first surface of the first article, comprise van der Waals forces.

42. (Previously Presented) The method of claim 40, wherein the forces between the nanofibers and the first surface of the second article and between the nanofibers and the first surface of the first article, further comprise friction forces.

43. (Currently amended) An adhesive device, the device comprising:

- i) a first article having at least a first surface;
- ii) at least a second article having at least a first surface; and,
- iii) a layer of silicon or silicon oxide nanofibers disposed between the first surface of the first article and the first surface of the at least second article, whereby the nanofibers contact the first surface of the first article at a plurality of contact points and the first surface of the at least second article at a plurality of contact points, wherein at least a portion of the plurality of contact points are on a side surface of said nanofibers wherein the contacting creates van der Waals forces between the nanofibers and the first surface of the first and second articles, such that the van der Waals forces between the nanofibers and the first surface of the first article and the first surface of the at least second article are sufficient to adhere the articles together.

44. (cancelled)

45. (Withdrawn) The device of claim 43, wherein physical contact between the first and at least second substrate produces a van der Waals attraction between the surfaces.

46. (Previously Presented) The device of claim 43, wherein contacting the first surface of the first article and the first surface of the at least second article additionally creates friction forces between the surfaces.

47. (Previously Presented) The device of claim 43, wherein the van der Waals forces comprises from at least about 0.1 newton per centimeter² to at least about 100 newtons per centimeter².

48. (Previously Presented) The device of claim 43, wherein the van der Waals forces comprises from at least about 0.5 newton per centimeter² to at least about 50 newtons per centimeter².

49. (Previously Presented) The device of claim 43, wherein the van der Waals forces comprises from at least about 1 newton per centimeter² to at least about 25 newtons per centimeter².

50. (Previously Presented) The device of claim 43, wherein the van der Waals forces comprises from at least about 2 newtons per centimeter² to at least about 10 newtons per centimeter².

52. (Original) The device of claim 43, wherein the nanofibers comprise hollow nanotubular structures.

52. (Original) The device of claim 43, wherein substantially all nanofibers comprise one or more associated moiety.

53. (Original) The device of claim 52, wherein the one or more moiety comprises a functional moiety.

54. (Previously Presented) The device of claim 53, wherein the functional moiety increases a van der Waals attraction between the nanofiber and one or more of the first surface of the first article or the first surface of the at least second article,

to be greater than a van der Waals attraction between the nanofiber and such surfaces in the absence of the moiety.

55. (Previously Presented) The device of claim 53, wherein the functional moiety increases friction forces between the nanofiber and one or more of the first surface of the first article or the first surface of the at least second article to be greater than a friction force between the nanofiber and such surfaces in the absence of the moiety.

56. (Previously Presented) The device of claim 43, wherein substantially each member of the plurality of nanofibers passes more than once though a selected plane above the first surface of the first and second articles.

57. (cancelled)

58. (Currently amended) The device of claim 43, wherein the ~~silicon~~ nanofibers are grown on one or both of the first surface of the first article and/or the first surface of the second article.

59. (Currently amended) The device of claim 58, wherein the ~~silicon~~ nanofibers are grown by a VLS process.

60. (Currently amended) The device of claim 58, wherein the ~~silicon~~ nanofibers have a length of at least about 50 microns.

61. (Currently amended) A method of adhering two or more surfaces, the method comprising:

- i.) providing a first surface comprising a plurality of silicon or silicon oxide nanofibers attached thereto;
- ii.) providing at least a second surface; and,
- iii.) contacting the first surface and the at least second surface, wherein at least a portion of the plurality of nanofibers contacts the second surface on a side

surface of said nanofibers wherein the contacting creates van der Waals forces between the nanofibers and the second surface which van der Waals forces are sufficient to adhere the surfaces together.

62. (Currently amended) The method of claim 61, wherein the ~~silicon~~ nanofibers are grown on ~~one or both of the first surface of the first article and/or the first surface of the second article.~~

63. (Currently amended) The method of claim 62, wherein the ~~silicon~~ nanofibers are grown by a VLS growth process.

64. (Currently amended) The method of claim 62, wherein the ~~silicon~~ nanofibers have a length of at least about 50 microns.

65. (Currently amended) A method of joining two or more articles, the method comprising:

- i) providing a first article having at least a first surface, wherein the first surface comprises a plurality of silicon or silicon oxide nanofibers attached thereto,
- ii) providing at least a second article having at least a first surface which does not comprise nanofibers;
- iii) mating the first surface of the second article with the plurality of nanofibers on the first surface of the first article, whereby the nanofibers contact the first surface of the second article at a plurality of contact points, wherein at least a portion of the plurality of nanofibers contacts the second surface on a side surface of said nanofibers wherein the contacting creates van der Waals forces between the nanofibers and the second surface, such that the van der Waals forces between the nanofibers and the first surface of the second article are sufficient to adhere the first article to the second article.